



# **2009-10 Influenza Epidemiology and Surveillance Weekly Status Report for Kansas**

**Week Ending November 21, 2009**

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# Executive Summary

***D. Charles Hunt, MPH, State Epidemiologist and Director  
Bureau of Surveillance and Epidemiology  
Kansas Department of Health and Environment***

## **Overview**

Although influenza activity has continued to decline through the week ending November 21<sup>st</sup>, the week ending November 21<sup>st</sup> marks the 13th straight week of elevated influenza activity in Kansas, as measured by the percentage of patients seeking care in ILINet outpatient clinics for influenza-like illness (ILI). And some of regions of the state, particularly the southeast and northwest, continue to report levels that are twice as high as we would expect to see at this time of the year.

As of the week ending November 21<sup>st</sup>, 19 deaths due to pandemic 2009 H1N1 influenza A virus had been confirmed and reported in Kansas, which, as mentioned in previous reports and media releases, likely under-represents the actual number of deaths that have been caused by this virus. The percent of all deaths caused by influenza or pneumonia – one of the most common complications of influenza – is utilized as an indicator of the impact of influenza. Nationally, the proportion of all reported deaths that is due to pneumonia or influenza has remained above the epidemic threshold for seven consecutive weeks.

An important epidemiologic characteristic of the 2009 H1N1 influenza virus is the higher disease burden among younger people. This is reflected in the most recent estimates from the Centers for Disease Control and Prevention (CDC) regarding the numbers of persons who have become ill, the number of patients hospitalized, and the number of deaths caused by this virus. The deaths due to the 2009 H1N1 influenza virus that have been confirmed and reported in Kansas are consistent with national data. Although 90% of deaths attributed to influenza and associated complications typically occur among persons ages 65 years and older, 19 of the 21 2009 H1N1 influenza deaths confirmed and reported in Kansas have occurred among persons under age 65. Although most (15) of the deaths have occurred among persons with underlying health conditions that increased their risk of serious complications from influenza, more than one-fourth of those who have died did not have risk factors that have previously been identified to increase the risk of death from influenza. Kansas, along with other states all across the U.S., is participating in epidemiologic assessments with the CDC to better understand the risk factors associated with severe complications from 2009 H1N1 influenza A virus infection.

## **Outpatient Visits for Influenza-like Illness (ILINet)**

Fifty-two (71%) of the 73 ILINet sites in Kansas reported ILI data for the week ending November 21<sup>st</sup>. The statewide percentage of ILI visits at outpatient clinics peaked at 10.8% the week ending October 24<sup>th</sup> and has declined steadily to a rate of 3.1% for the week ending November



## Executive Summary (continued)

21<sup>st</sup>. Over the past four weeks, since the week ending October 31st, the rate of ILI has declined by an average of 26% per week. Despite the downward trend, the percentage of ILI visits remains above the expected levels during a normal influenza season. Nationally, the percentage of ILI patient visits reported the week ending November 14 was 5.5%, but anecdotal reports from other states suggest the rates have continued to decline across the U.S.

The percentage of ILI visits reported varied substantially by region throughout Kansas, with rates in some areas still more than two times above baseline. The highest percentages (5.1%) were reported in the southeast and northwest regions. The southwest region reported the lowest percentage (2.2%). It should be noted that 21 of the 73 sites did not report by the deadline, so these rates could change based on more complete data.

### **Hospital Admissions for Pneumonia or Influenza (EMSystems)**

For the week ending November 21, 90 (68%) of 132 hospitals reported 330 patients who were admitted for pneumonia or influenza. The statewide rate of hospital admissions per 100 bed days remained essentially unchanged the last two weeks, from 0.57 the week ending November 14 to 0.61 the week ending November 21. However, the rates overall have declined by an average of 15% since the week ending October 31. Rates for the week ending November 21 ranged from 0.27, in the north central region, to 1.02, in the southwest region.

### **Hospital Situational Awareness**

On Wednesday, November 18, 92 (69%) of 134 hospitals reported situational awareness information through EMSysystems. Compared to information that was reported for the previous Wednesdays, the percentage of hospitals reporting increased demand for patient care services decreased throughout the state for the fourth week in a row. Five (5.4%) hospitals reported an increased demand for patient care services. The hospitals reporting increased demand were located in the south central (2), northeast (1), southeast (1), and southwest (1) regions.

### **Mortality Due to Pneumonia or Influenza**

Thirty-two (5.9%) of the 538 deaths reported to KDHE during the week ending November 21 were due to pneumonia or influenza, an increase compared to the previous week. The largest number of pneumonia and influenza deaths is attributed to persons 65 years and older. Since September 26, no deaths have been reported in persons less than 25 years of age. Nationally, the percentage of all deaths due to pneumonia or influenza reported the week ending November 14 was 7.5%.

### **Self-reported Influenza-like Illness**

No new data for interviews were included in this week's report.

# Executive Summary (continued)

## **School Absenteeism**

For the week ending November 20, 88 (84%) of the 105 Kansas counties reported the percentage of schools reporting 10% or greater absenteeism. The statewide percentages continued to decrease for all categories compared to the previous week: from 9.9% to 6.3% for elementary schools, from 13.6% to 9.1% for middle schools, and from 12.8% to 11.5% for high schools. While statewide percentages fell, some increases were reported regionally. Increases were reported for all school types in the north central and southwest regions. Increases were also reported for elementary schools in the Kansas City, for middle schools in the northwest region, and for high schools in the northwest region.

The southeast region continues to report the highest percentages of schools reporting 10% or greater absenteeism (21% for elementary schools, 10% for middle schools, and 22% for high schools).

## **Laboratory-based Surveillance**

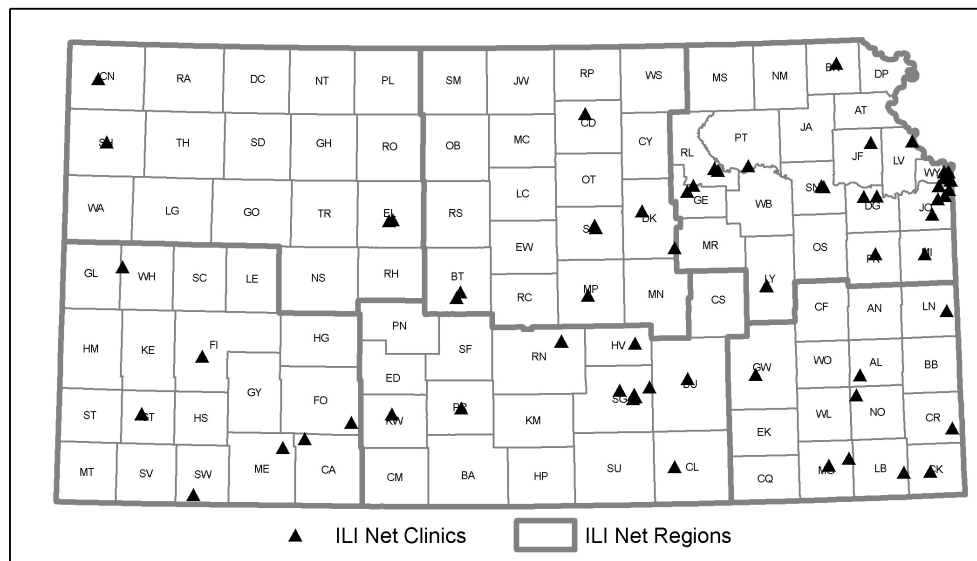
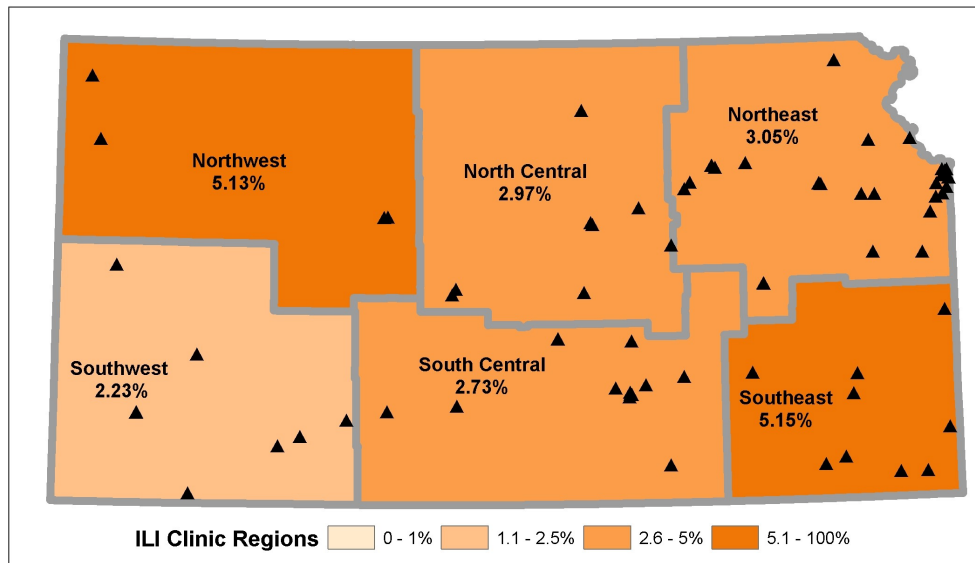
The percentage of submitted specimens which tested positive for influenza A (2009 H1N1) decreased for the fourth consecutive week. During the week ending November 21, 112 specimens were tested by KHEL. Of these, 24 (21%) tested positive for influenza A (2009 H1N1).

Since October 10, a total of 1,658 specimens have been submitted to the KDHE Laboratories (KHEL) for testing. Of these, 836 (50%) have tested positive for influenza A (2009 H1N1).

# Outpatient Influenza-like Illness (Surveillance Conducted via ILINet) Week ending November 21, 2009



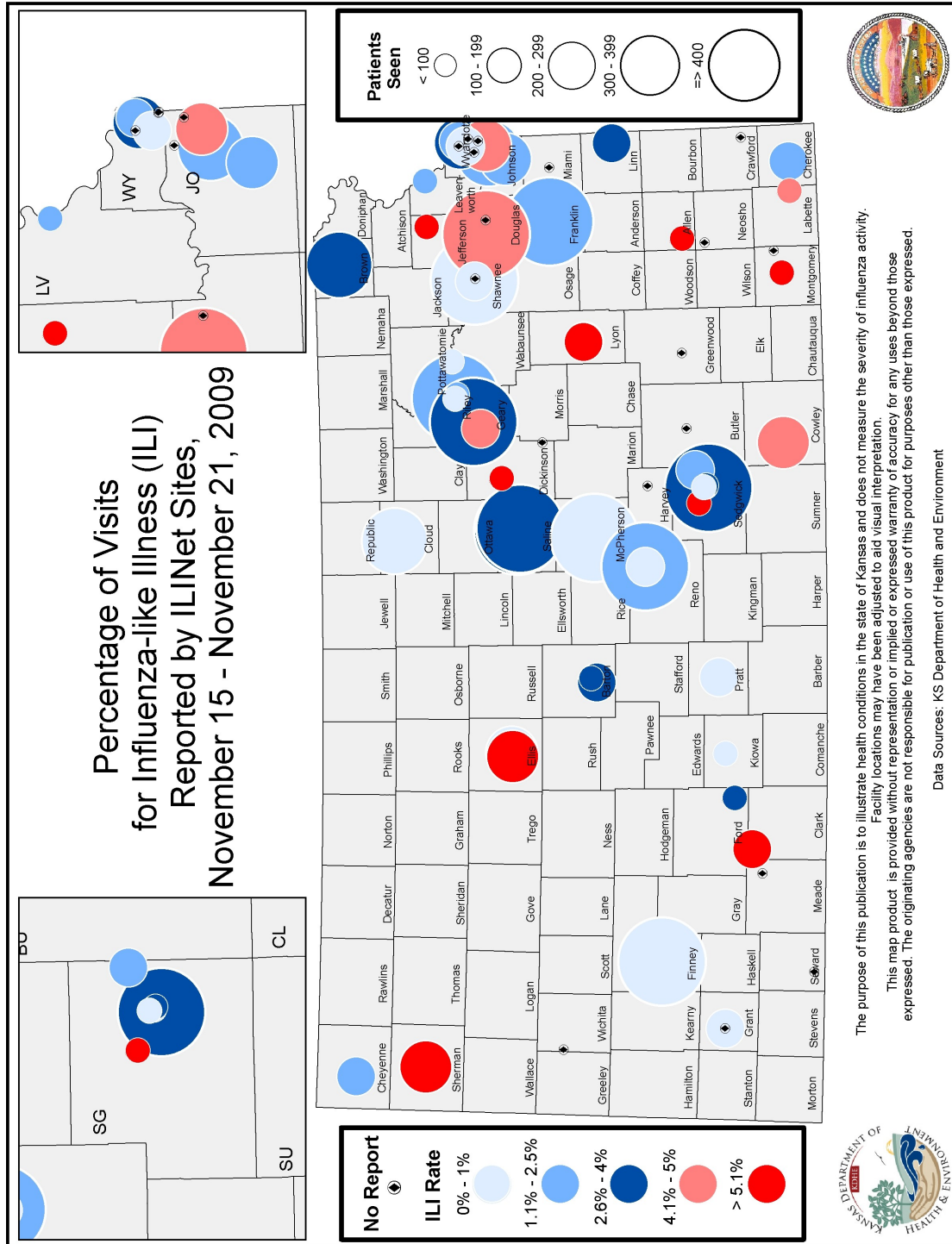
Percentage of Visits  
for Influenza-like Illness (ILI)  
Reported by ILINet Sites, by Region  
November 15 - November 21, 2009



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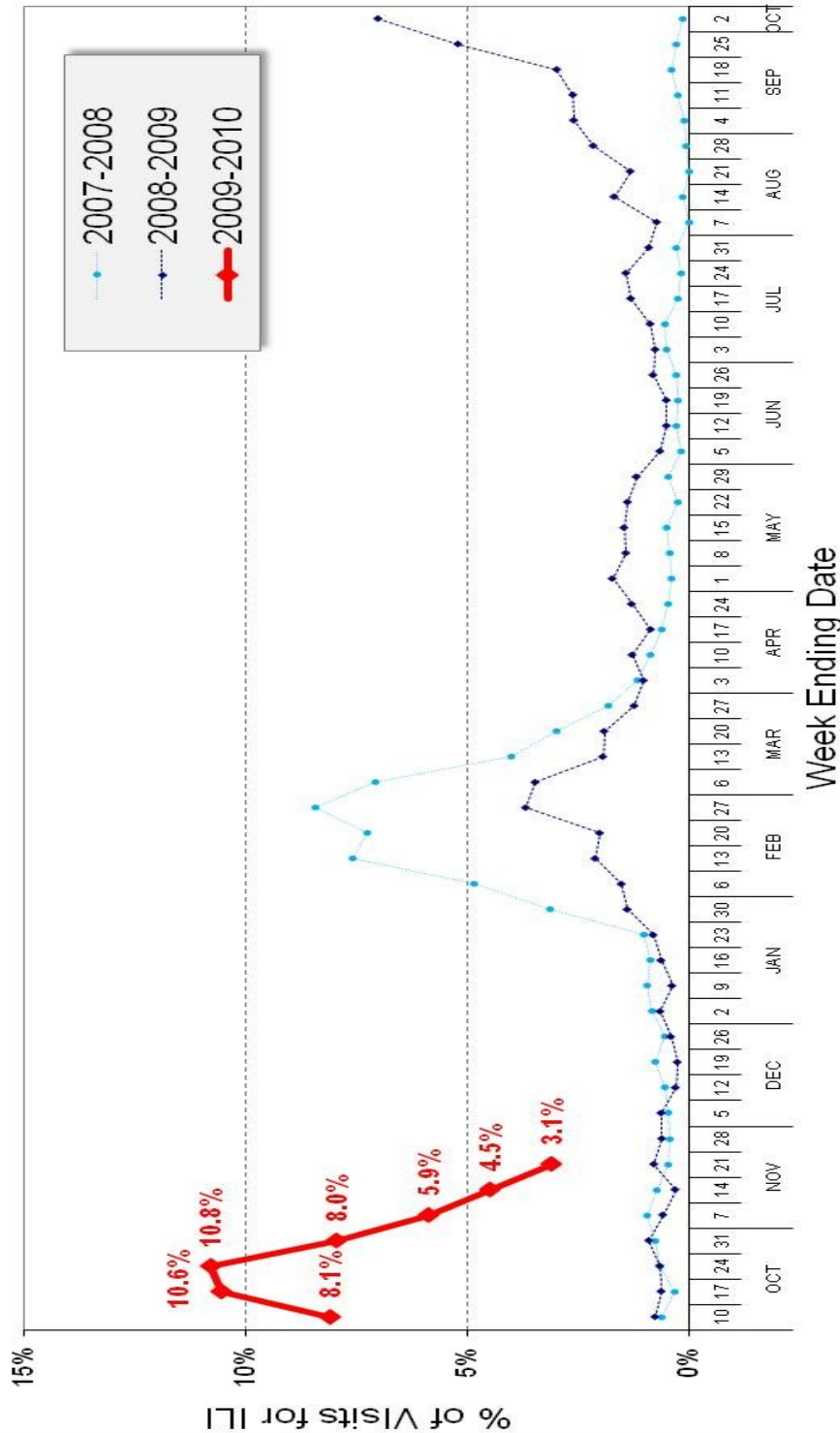
Data Sources: KS Department of Health and Environment

# Outpatient Influenza-like Illness (Surveillance Conducted via ILINet) Week ending November 21, 2009



# Outpatient Influenza-like Illness (Surveillance Conducted via ILINet) Week ending November 21, 2009

Percentage of Visits for Influenza-like Illness (ILI) Reported by ILINet Sites,  
Kansas, October 2009 - September 2010 and Previous Two Seasons



The X-axis represents the week ending dates for the 2009-2010 surveillance year. Data from the previous two surveillance years are plotted according to week number corresponding to the 2009-2010 week ending date. Week 40 of 2009 ended October 10, 2009. Week 40 of 2008 ended October 4, 2008, and week 40 of 2007 ended October 6, 2007, and so on. Week 53 was unique to the 2008-2009 season; data for that week has been excluded from the chart. ILINet sites vary in location, number, and type (student health, family practice, etc.) each season as new sites are enrolled and former sites are deactivated.

# Outpatient Influenza-like Illness (Surveillance Conducted via ILINet) Week ending November 21, 2009



Percentage of Visits  
for Influenza-like Illness (ILI)  
Reported by ILINet Sites, by Region and Week  
as Reported on November 21, 2009



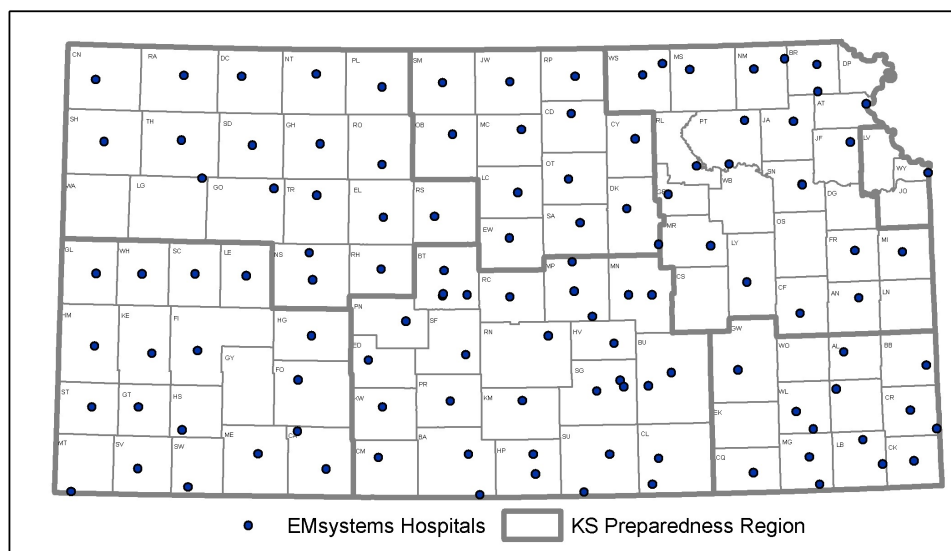
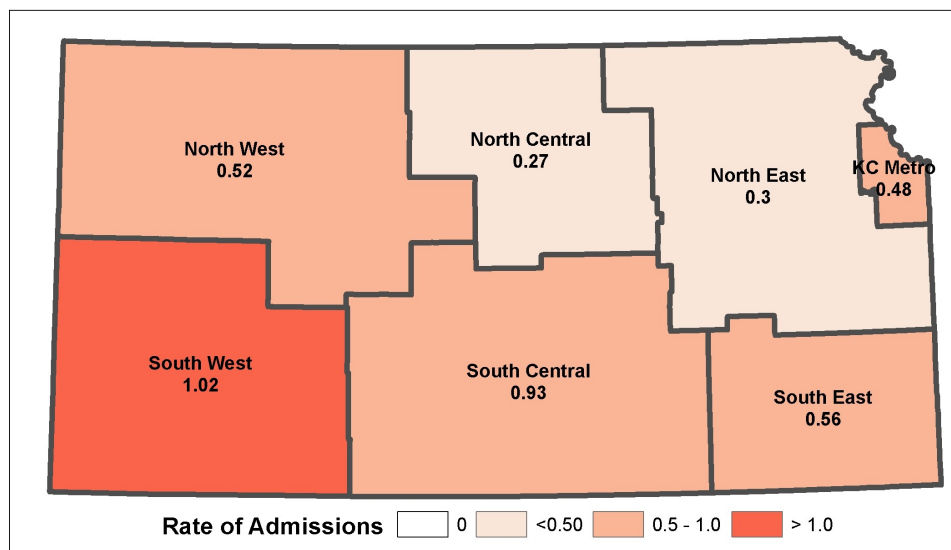
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Data Sources: KS Department of Health and Environment

# Hospital Admissions (Surveillance Conducted via EMSys)ems) Week ending November 21, 2009



Rate of Hospitalizations  
due to Pneumonia or Influenza  
per 100 Bed-Days\*  
by Preparedness Region,  
November 15 - November 21, 2009

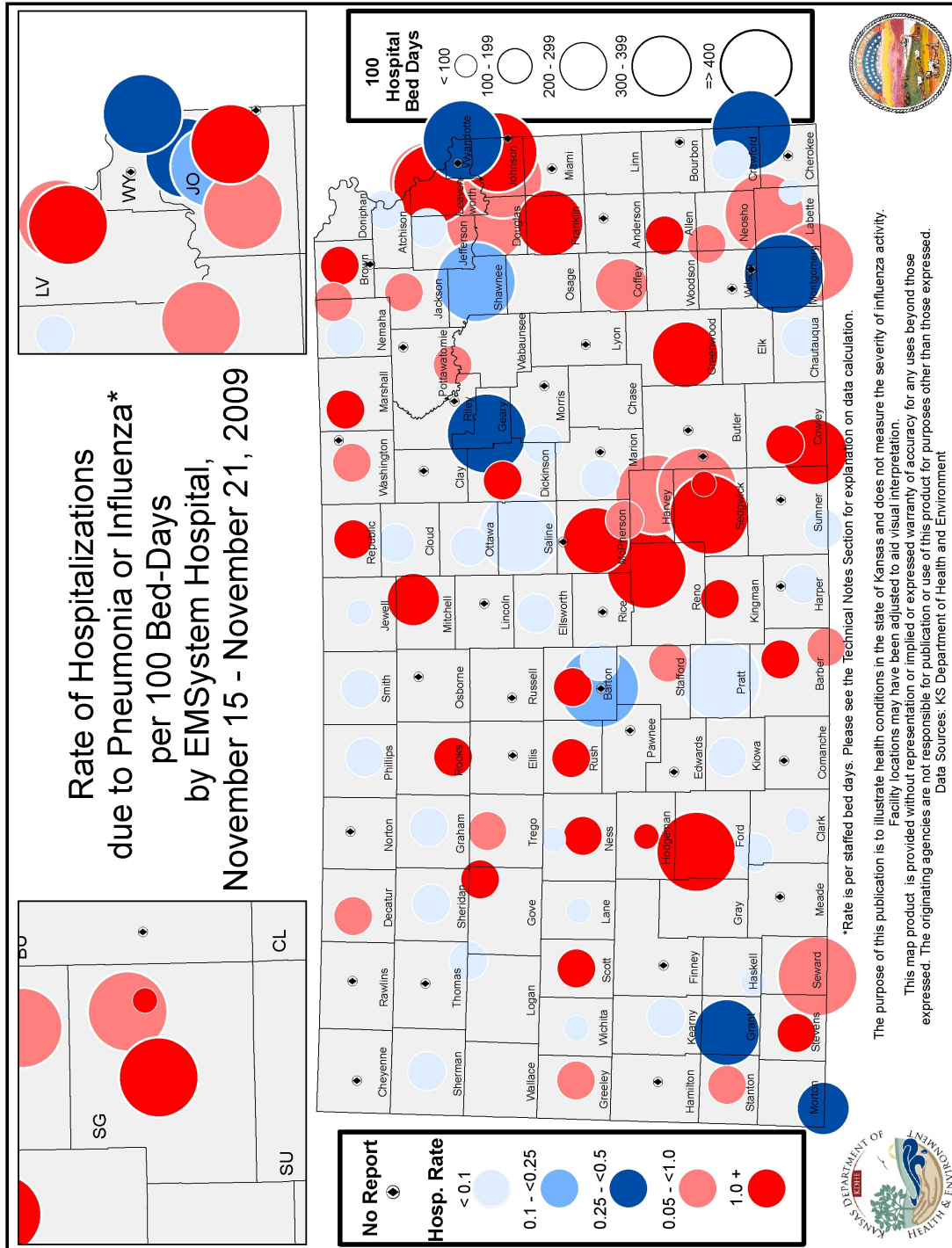


\*Rate is per staffed bed days. Please see the Technical Notes Section for explanation on data calculation.

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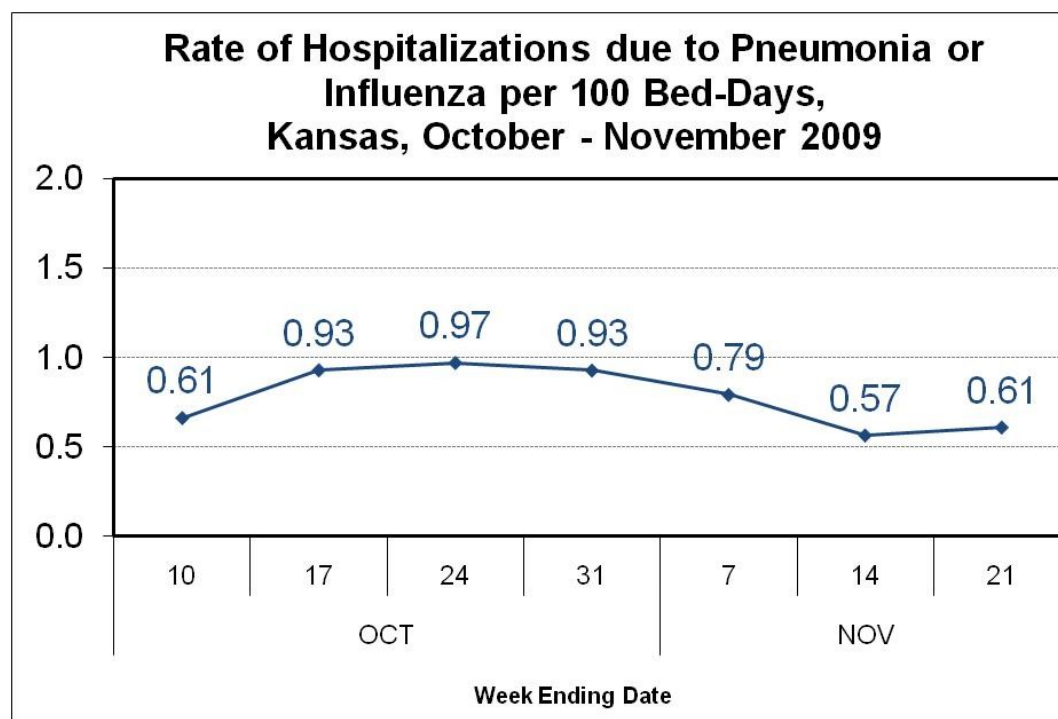
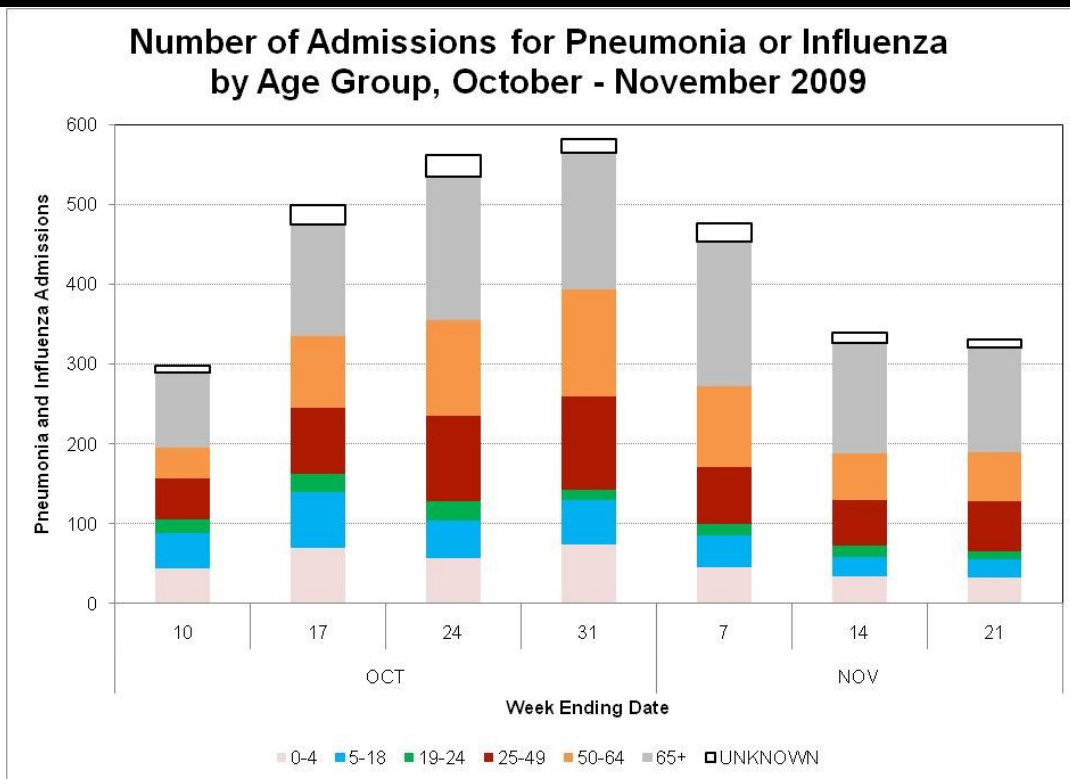


# Hospital Admissions (Surveillance Conducted via EMSystems) Week ending November 21, 2009



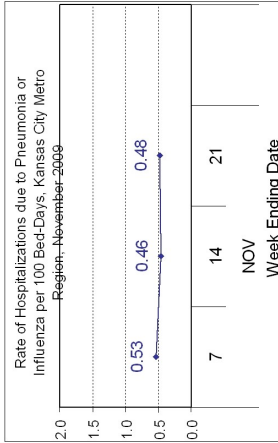
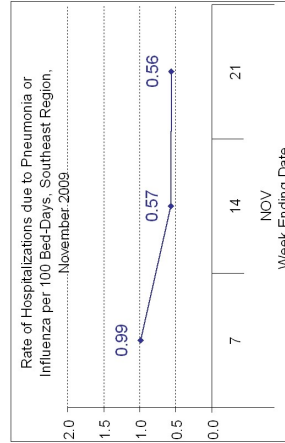
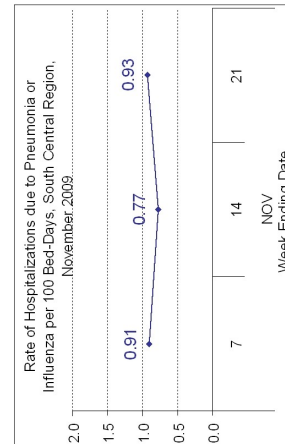
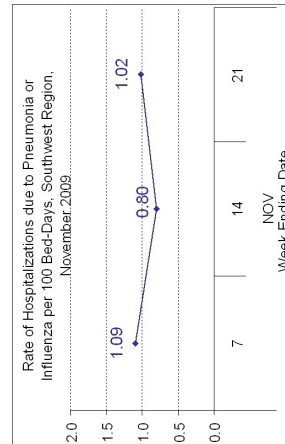
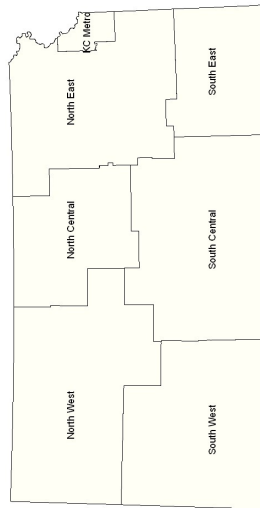
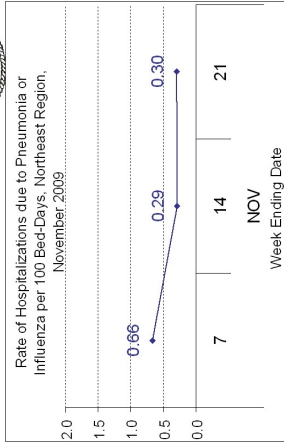
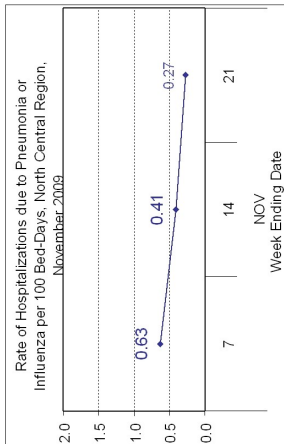
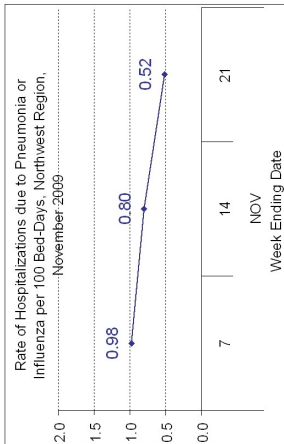


# Hospital Admissions (Surveillance Conducted via EMSystems) Week ending November 21, 2009



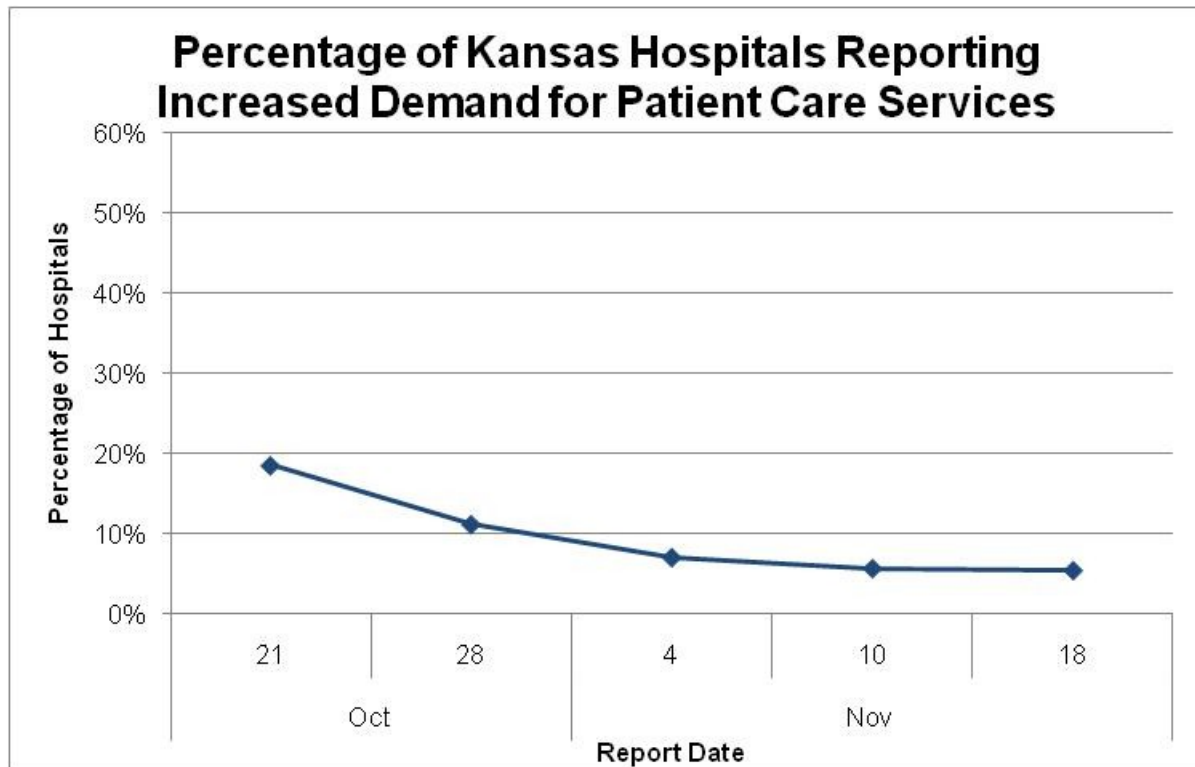


## Rate of Hospitalizations due to Pneumonia or Influenza per 100 Bed-Days by Preparedness Region as Reported on November 21, 2009

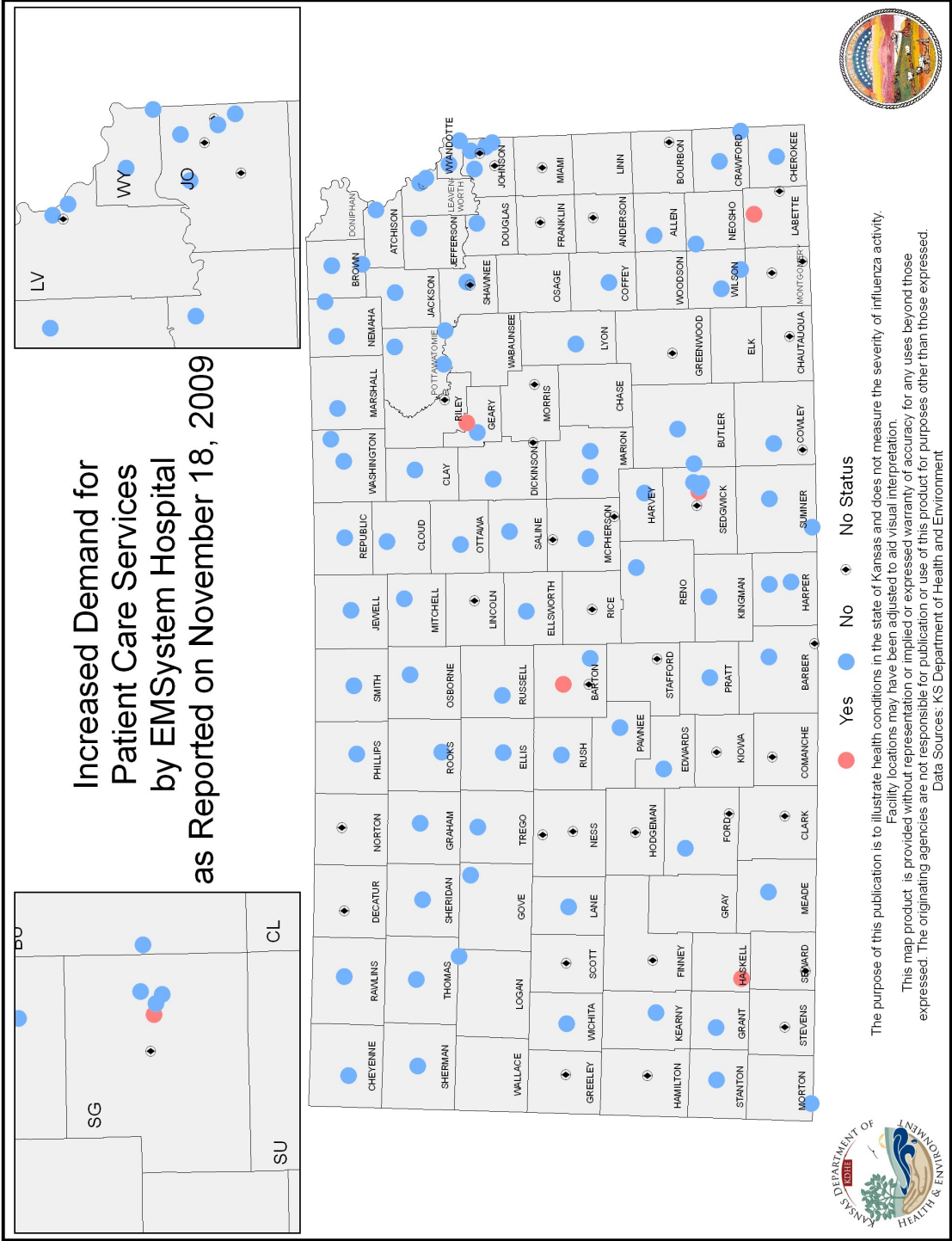


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## Hospital Situational Awareness (Surveillance Conducted via EMSystems)



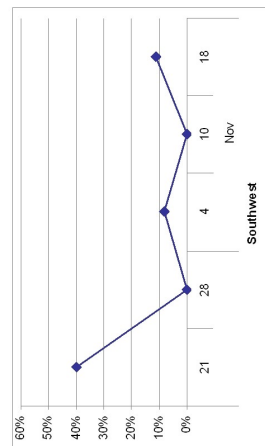
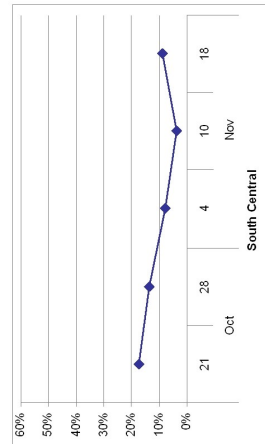
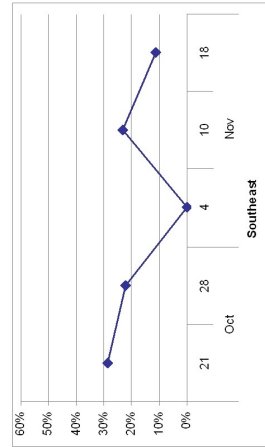
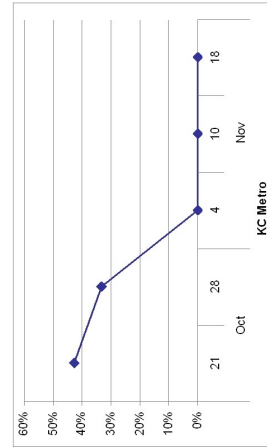
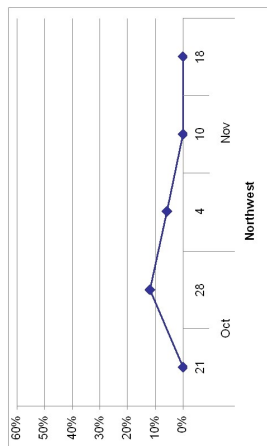
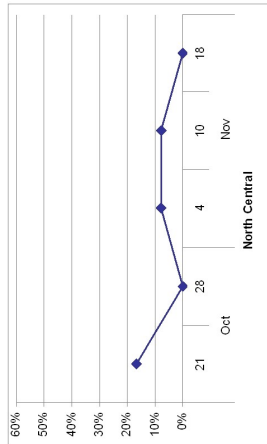
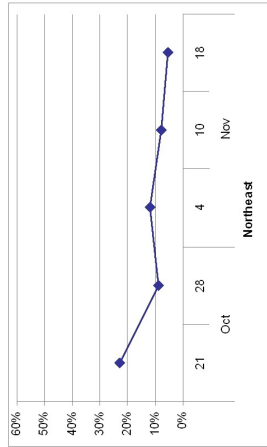
## Hospital Situational Awareness (Surveillance Conducted via EMSystems)



# Hospital Situational Awareness (Surveillance Conducted via EMSystems)

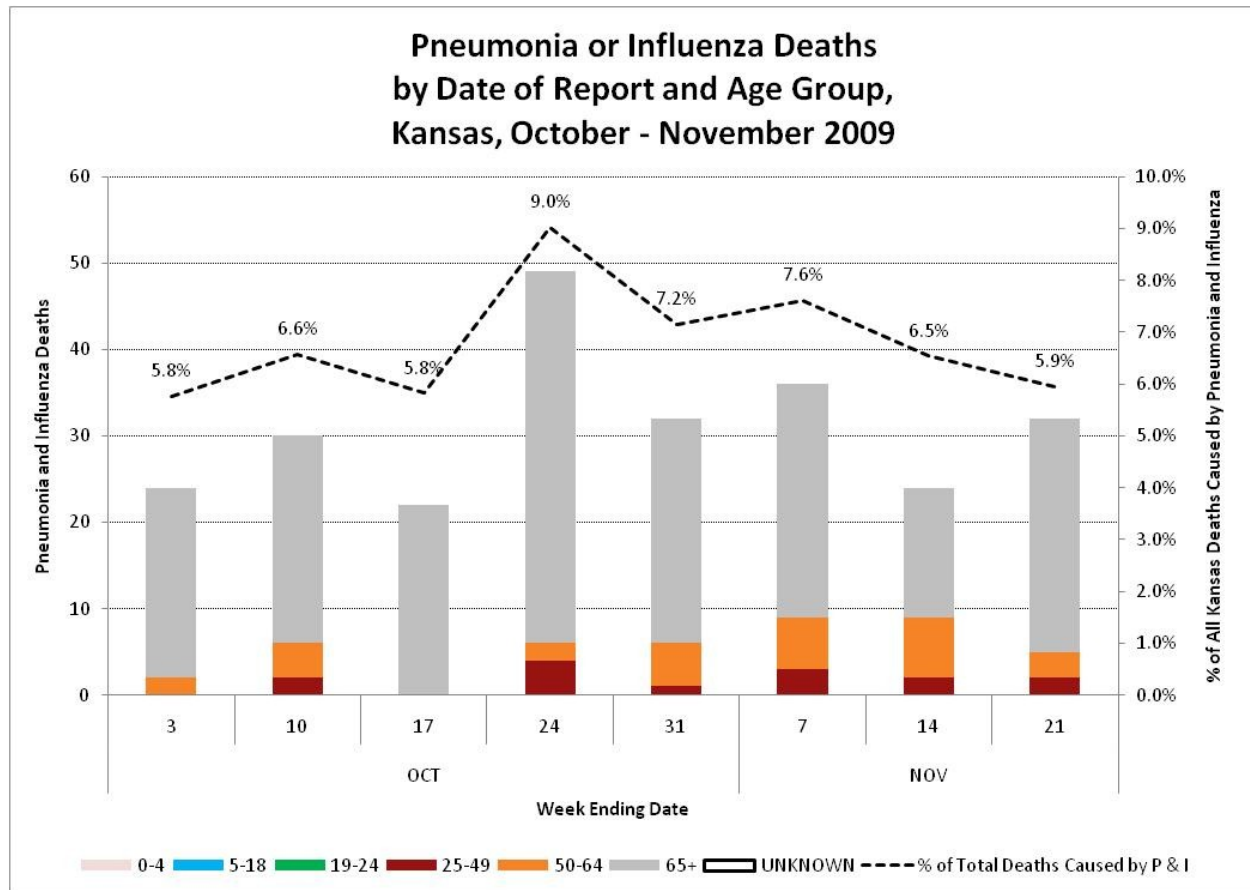


## Percentage of Hospitals with Increased Demand for Patient Care Services by Preparedness Region as Reported on November 18, 2009



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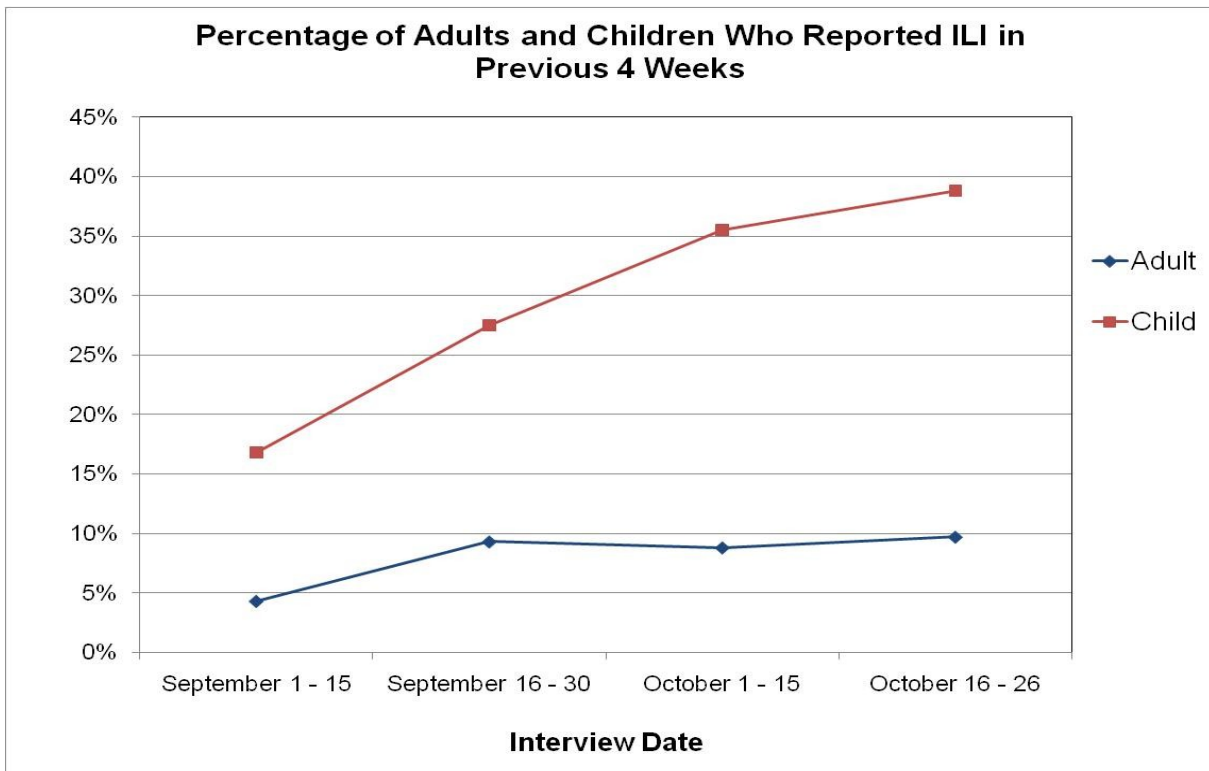
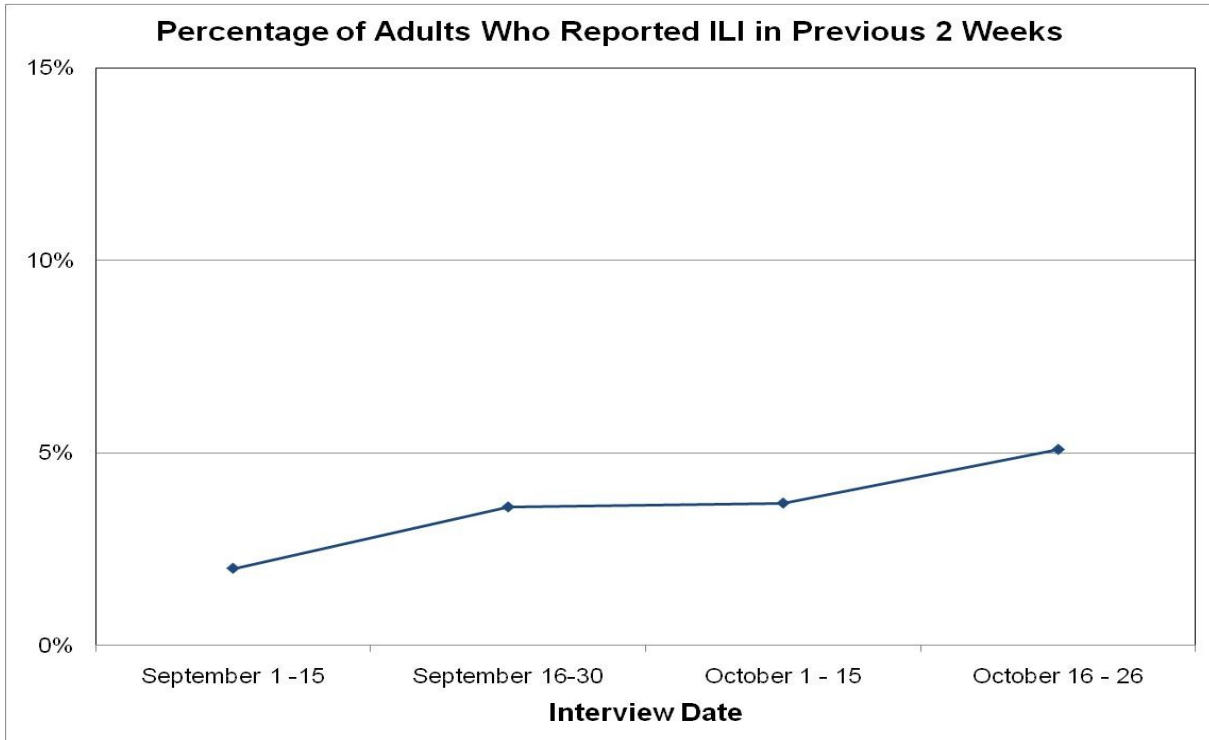
## Mortality Due to Pneumonia or Influenza (Surveillance Conducted via KDHE Vital Statistics)



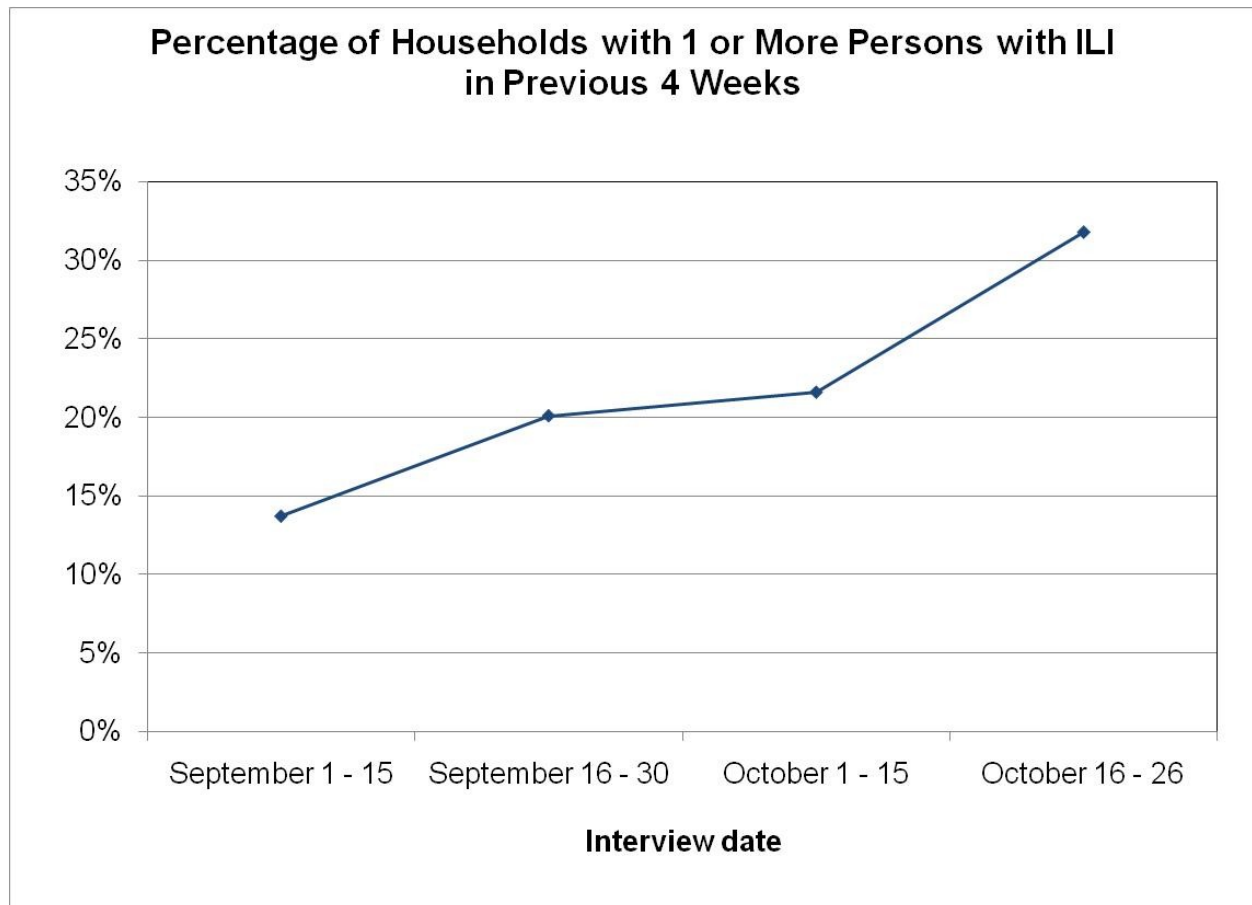
### Cumulative Number of Pneumonia or Influenza Deaths Reported by Age Group, September 26—November 21, 2009

0-4	5-18	19-24	25-49	50-64	65+	Unknown	Total
0	0	0	15	29	243	1	288

## Self-Reported Influenza-like Illness (Surveillance Conducted via KDHE BRFSS)



## Self-Reported Influenza-like Illness (Surveillance Conducted via BRFSS)





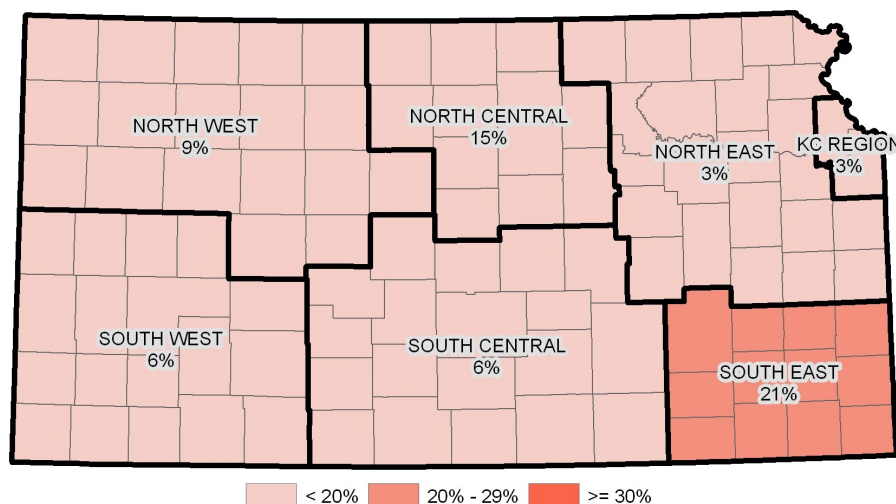
# School Absenteeism (Surveillance Conducted via Health Departments) Week ending November 20, 2009



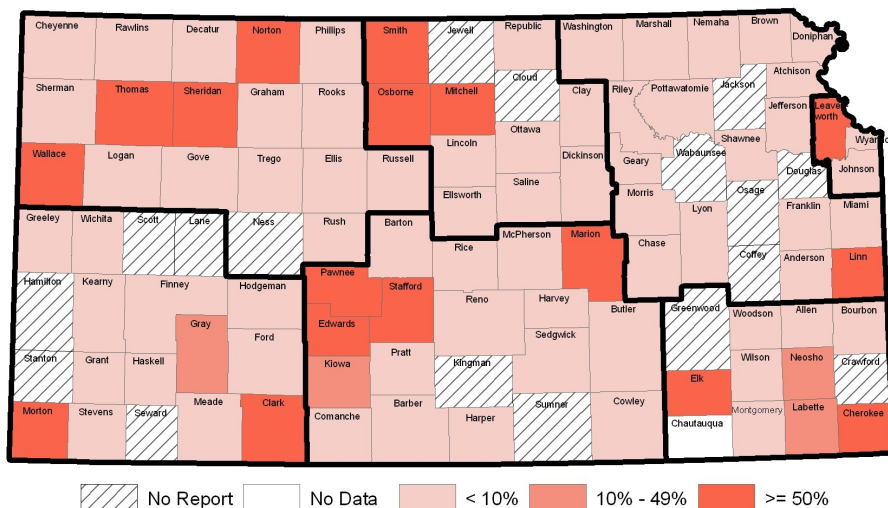
Percentage of Schools Reporting  
10% or Greater Absenteeism  
November 16 - November 20, 2009



## Preparedness Region Summary for Elementary Schools



## County Summary for Elementary Schools



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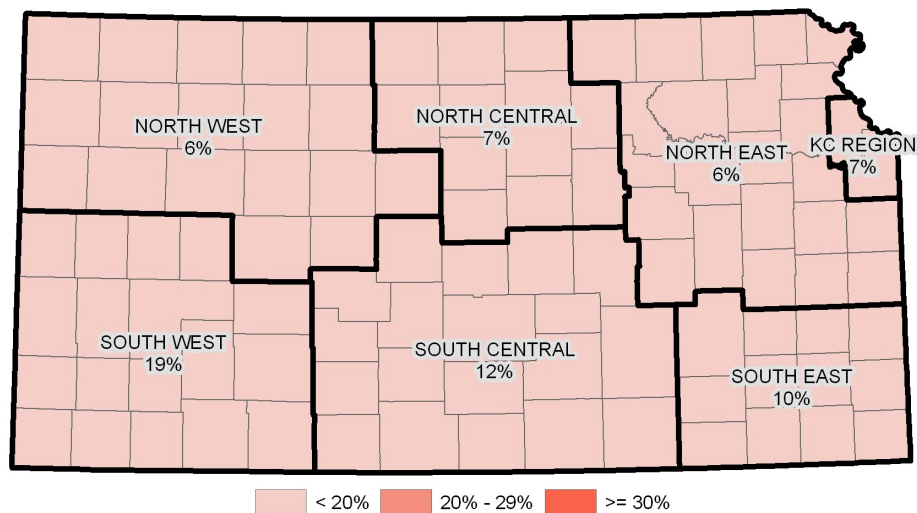
# School Absenteeism (Surveillance Conducted via Health Departments) Week ending November 20, 2009



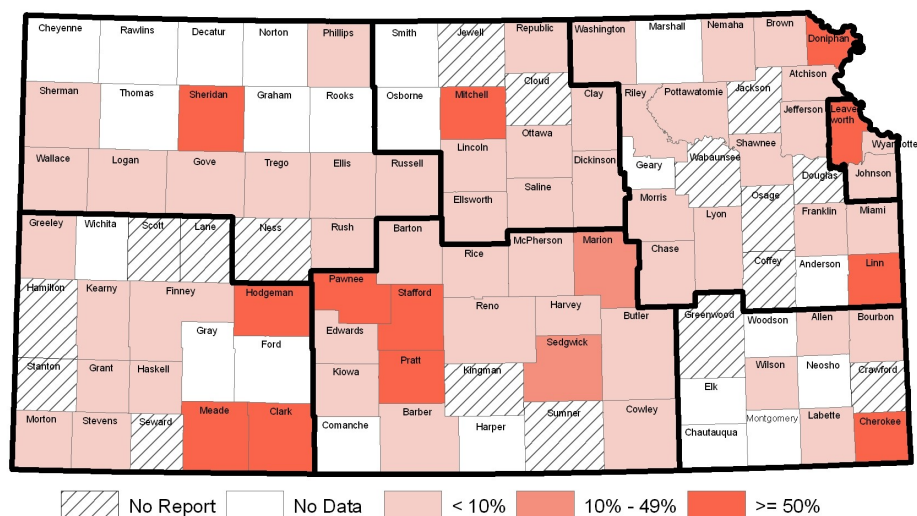
Percentage of Schools Reporting  
10% or Greater Absenteeism  
November 16 - November 20, 2009



## Preparedness Region Summary for Middle Schools



## County Summary for Middle Schools



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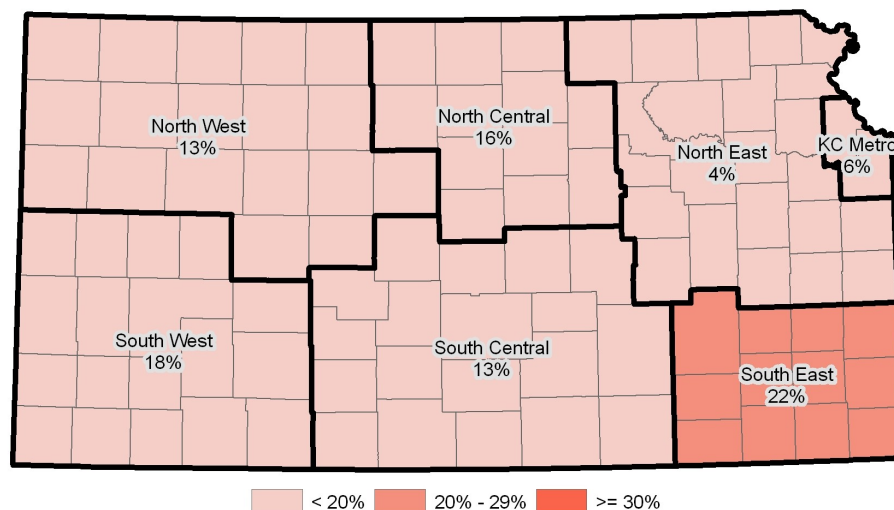
# School Absenteeism (Surveillance Conducted via Health Departments) Week ending November 20, 2009



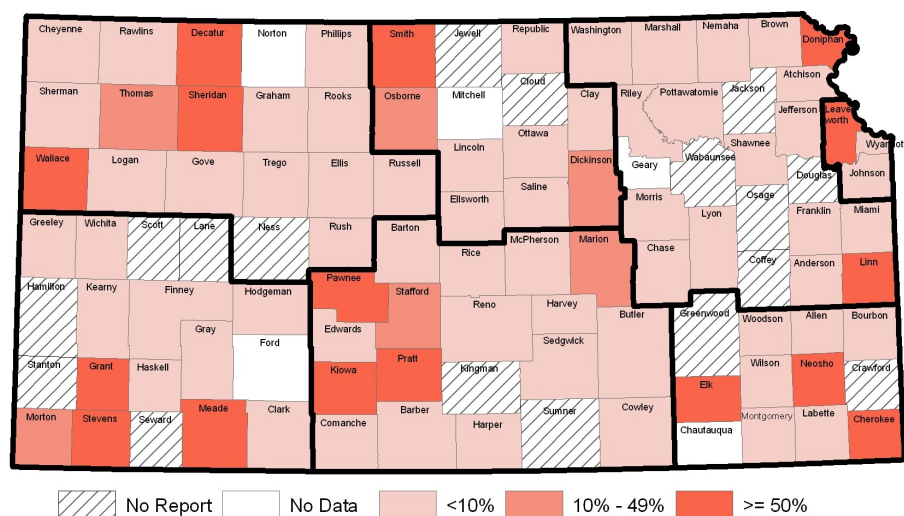
Percentage of Schools Reporting  
10% or Greater Absenteeism  
November 16 - November 20, 2009



## Preparedness Region Summary for High Schools

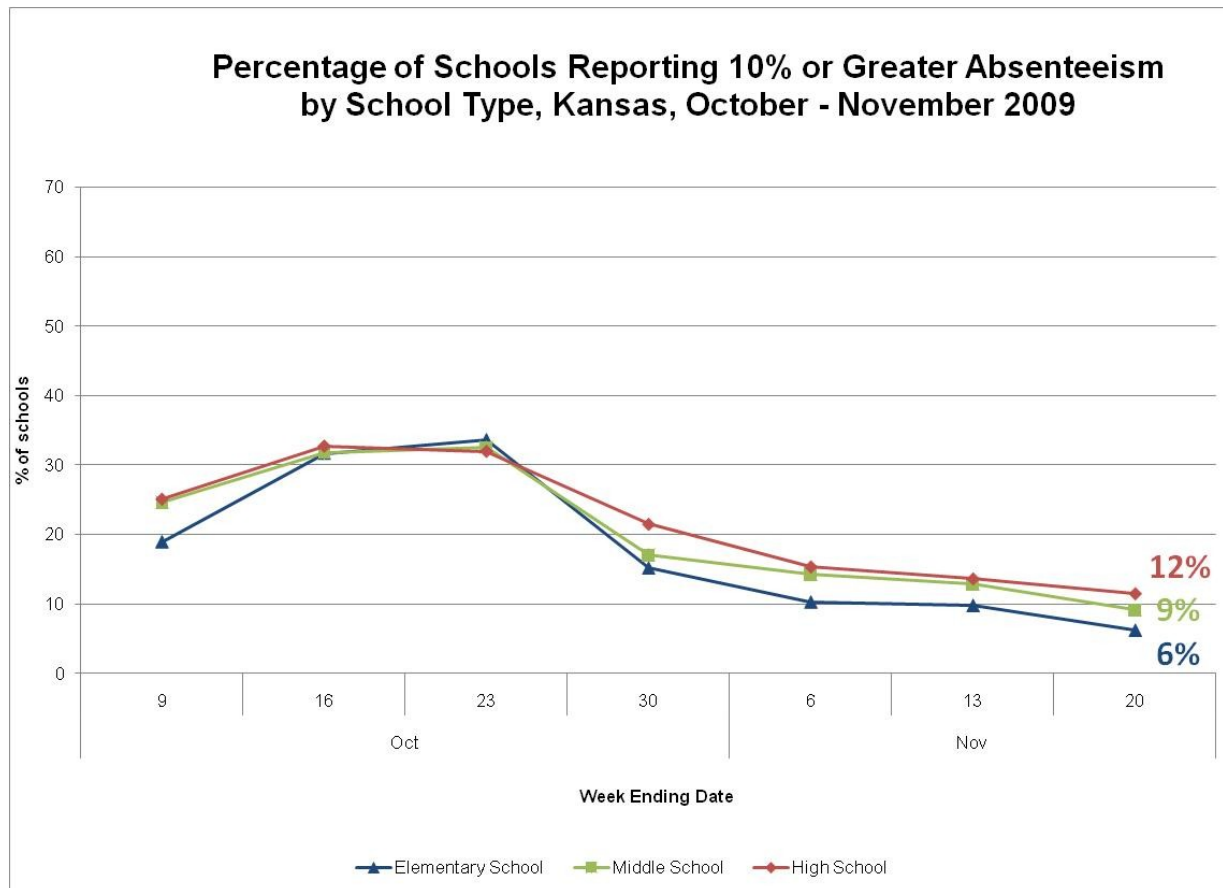


## County Summary for High Schools



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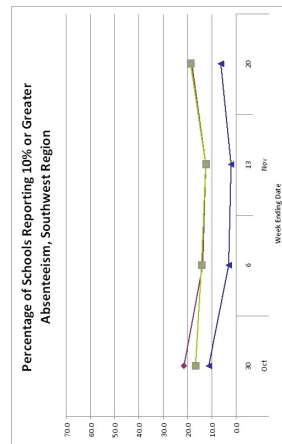
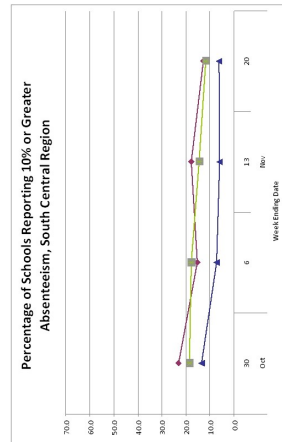
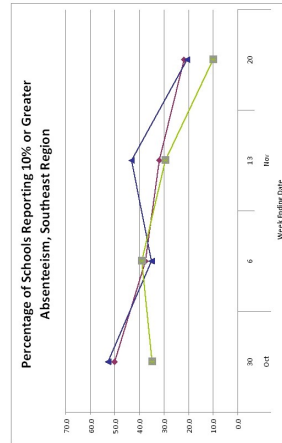
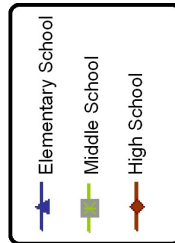
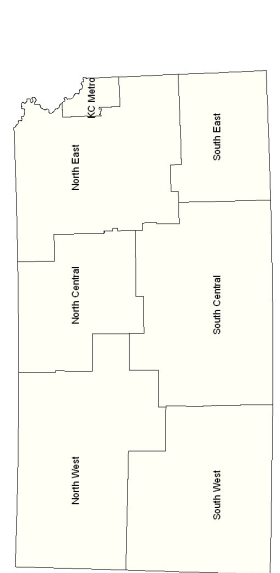
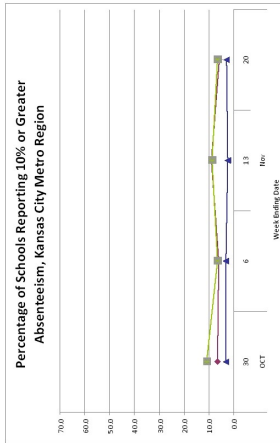
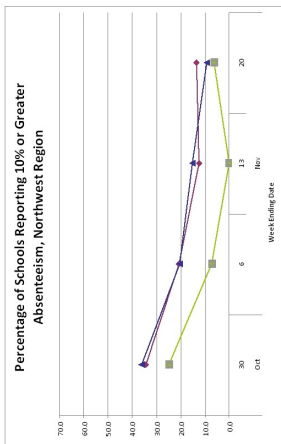
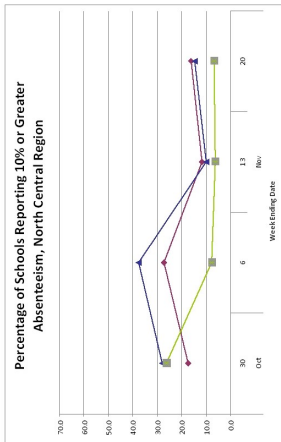
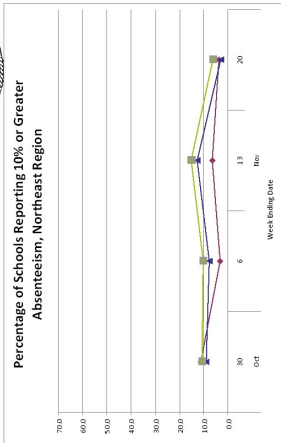
# School Absenteeism (Surveillance Conducted via Health Departments) Week ending November 20, 2009



# School Absenteeism (Surveillance Conducted via Health Departments) Week ending November 20, 2009



## Percentage of Schools Reporting 10% or Greater Absenteeism by Preparedness Region as Reported on November 20, 2009




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# Percentage of Schools Reporting 10% or Greater Absenteeism by Category and County, Week ending November 20, 2009


County	Elementary School	Middle School	High School
ALLEN	0%	0%	0%
ANDERSON	0%		0%
ATCHISON	0%	0%	0%
BARBER	0%	0%	0%
BARTON	0%	0%	0%
BOURBON	0%	0%	0%
BROWN	0%	0%	0%
BUTLER	0%	0%	0%
CHASE	0%	0%	0%
CHAUTAUQUA			
CHEROKEE	50%	50%	50%
CHEYENNE	0%		0%
CLARK	50%	50%	0%
CLAY	0%	0%	0%
CLOUD			
COFFEY			
COMANCHE	0%		0%
COWLEY	7%	0%	0%
CRAWFORD			
DECATUR	0%		100%
DICKINSON	0%	0%	17%
DONIPHAN	0%	50%	100%
DOUGLAS			
EDWARDS	50%	0%	0%
ELK	100%		50%
ELLIS	0%	0%	0%
ELLSWORTH	0%	0%	0%
FINNEY	0%	0%	0%
FORD	0%		
FRANKLIN	0%	0%	0%
GEARY	0%		
GOVE	0%	0%	0%
GRAHAM	0%		0%
GRANT	0%	0%	50%
GRAY	13%		0%

County	Elementary School	Middle School	High School
GREELEY	0%	0%	0%
GREENWOOD			
HAMILTON			
HARPER	0%		0%
HARVEY	0%	0%	0%
HASKELL	0%	0%	0%
HODGEMAN	0%	100%	0%
JACKSON			
JEFFERSON	0%	0%	0%
JEWELL			
JOHNSON	0%	0%	0%
KEARNY	0%	0%	0%
KINGMAN			
KIOWA	33%	0%	100%
LABETTE	20%	0%	0%
LANE			
LEAVENWORTH	71%	75%	67%
LINCOLN	0%	0%	0%
LINN	80%	100%	50%
LOGAN	0%	0%	0%
LYON	0%	0%	0%
MARION	75%	40%	40%
MARSHALL	0%		0%
MCPHERSON	0%	0%	0%
MEADE	0%	100%	50%
MIAMI	0%	0%	0%
MITCHELL	100%	100%	
MONTGOMERY	0%		0%
MORRIS	0%	0%	0%
MORTON	50%	0%	33%
NEMAHA	0%	0%	0%
NEOSHO	25%		67%
NESS			
NORTON	100%		
OSAGE			

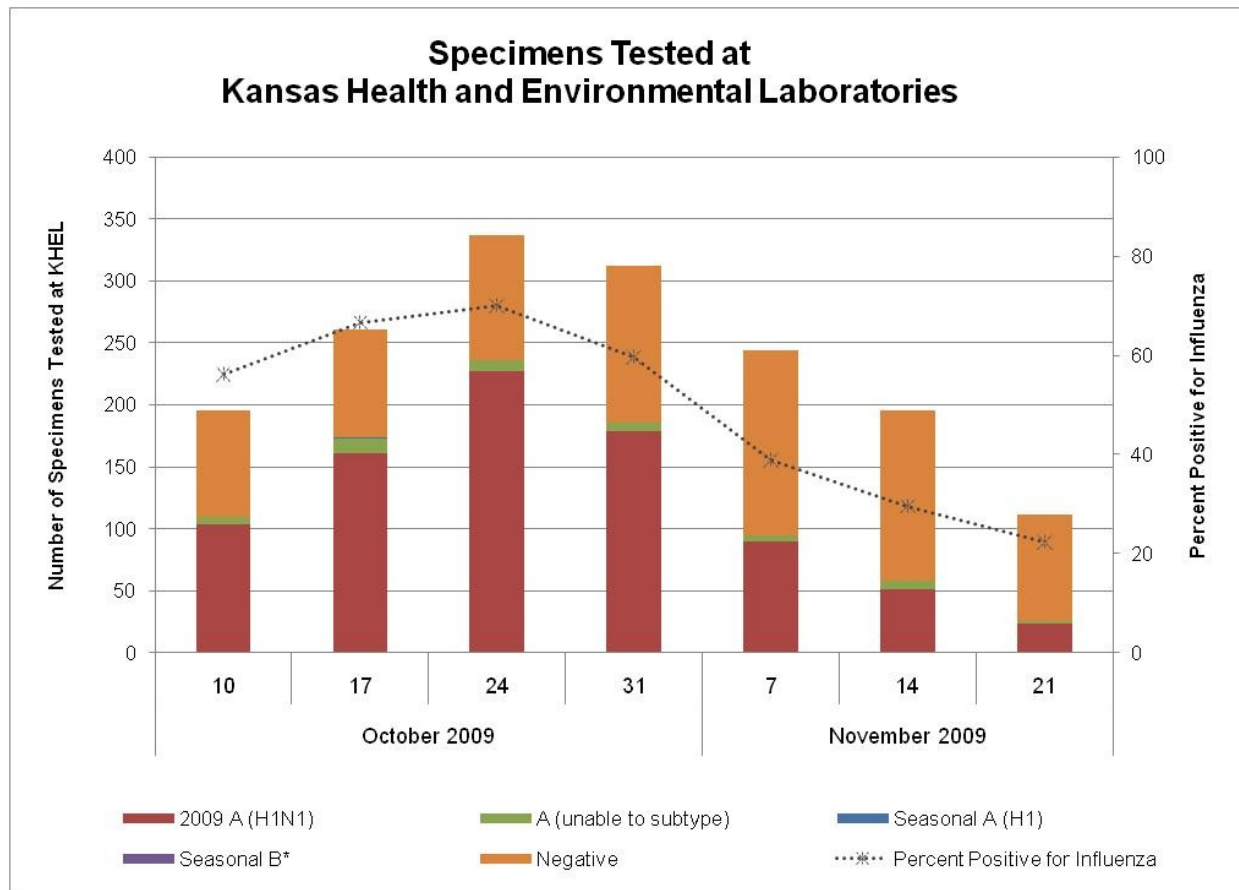
 No report or no data available

# Percentage of Schools Reporting 10% or Greater Absenteeism by Category and County, Week ending November 20, 2009

County	Elementary School	Middle School	High School
OSBORNE	67%		33%
OTTAWA	0%	0%	0%
PAWNEE	50%	100%	100%
PHILLIPS	0%	0%	0%
POTTAWATOMIE	0%	0%	0%
PRATT	0%	50%	100%
RAWLINS	0%		0%
RENO	0%	0%	0%
REPUBLIC	0%	0%	0%
RICE	0%	0%	0%
RILEY	0%	0%	0%
ROOKS	0%		0%
RUSH	0%	0%	0%
RUSSELL	0%	0%	0%
SALINE	0%	0%	0%
SCOTT			
SEDGWICK	0%	11%	0%
SEWARD			
SHAWNEE	0%	0%	0%
SHERIDAN	50%	100%	100%
SHERMAN	0%	0%	0%
SMITH	50%		100%
STAFFORD	67%	67%	33%
STANTON			
STEVENS	0%	0%	50%
SUMNER			
THOMAS	50%		33%
TREGO	0%	0%	0%
WABAUNSEE			
WALLACE	50%	0%	50%
WASHINGTON	0%	0%	0%
WICHITA	0%		0%
WILSON	0%	0%	0%
WOODSON	0%		0%
WYANDOTTE	0%	0%	0%

 No report or no data available

# Laboratory Testing (Surveillance Conducted via Kansas Health and Environmental Laboratories)



## Kansas Department of Health and Environmental Laboratories October 10—November 21, 2009

No. of specimens submitted for testing at KHEL	1658
No. of specimens testing positive for influenza A (2009 H1N1)	836 (50%)

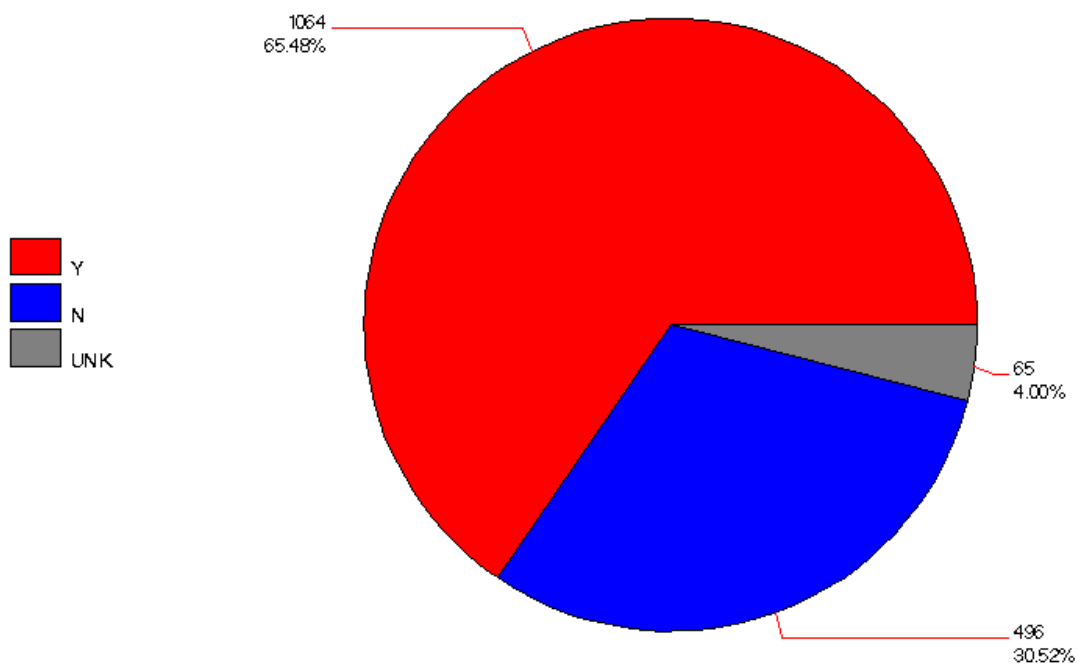


# Laboratory Testing (Surveillance Conducted via Kansas Health and Environmental Laboratories)

## Influenza Specimens Tested at KHEL by Hospitalization Status

October 4, 2009 — November 21, 2009

FREQUENCY of Hospitalized



## Descriptive Epidemiology of KHEL-Confirmed H1N1 Cases

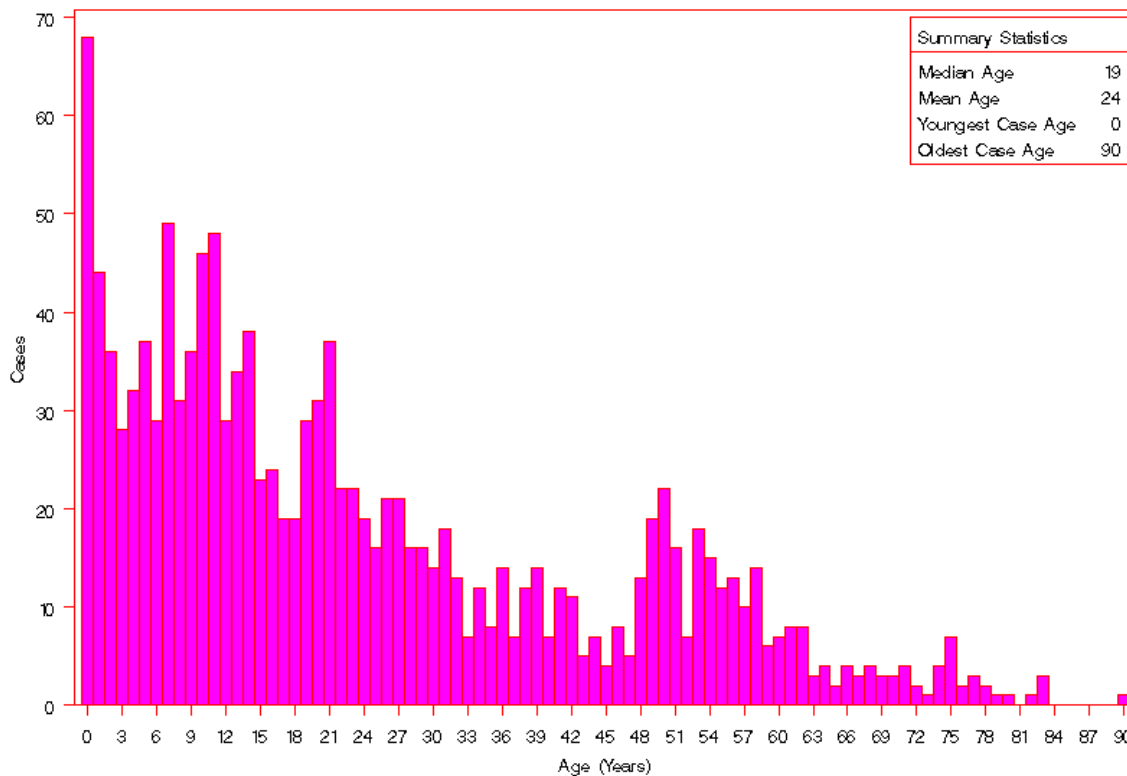
[illegible]

**Data Sources:** KS Department of Health and Environment

# Descriptive Epidemiology of KHEL-Confirmed H1N1 Cases

Characteristics of Laboratory Confirmed Cases	
Median Age (Years)	19.0
Age Range (Years)	<1 to 90
Percent (%) by Age Group:	
<5 Years	(16)
5 to 24 Years	(46)
25 to 49 Years	(22)
50 to 64 Years	(12)
65+ Years	(4)
Percent (%) Male	(46)
Percent (%) Hispanic or Latino	(18)
Percent (%) by Race	
White Only	(73)
Black Only	(8)
Other	(5)
Unknown	(14)
Percent (%) Died	(1)

**Age Distribution of Laboratory Confirmed Cases as of November 21, 2009**



# Technical Notes

## **Outpatient Influenza-like Illness Surveillance (ILINet)**

Information on patient visits to health care providers for influenza-like illness is collected through the US Outpatient Influenza-like Illness Surveillance Network (ILINet). For this system, ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a KNOWN cause other than influenza.

ILINet clinics in Kansas report the number of patients seen with influenza-like illness each week. The information reflects data collected for the week ending the previous Saturday. As of November 21, 2009, seventy-three sites have enrolled in ILINet in Kansas. The maps and charts on pages 6-9 show the percentage of ILI visits reported by region and by site by week ending date. Each percentage was calculated by dividing the number of patients seen with ILI at the clinic by the total number of patients seen and multiplying by 100.

Influenza-like illness data are collected from Sunday through Saturday of each week. Each participating clinic is requested to summarize the data weekly and submit the data by noon on Tuesday of the following week. The information on these charts may change each week because of data that may have been submitted after the reporting deadline.

## **Hospital Admissions for Pneumonia or Influenza Surveillance (EMSystems)**

Hospitals throughout Kansas submit information to the Kansas Hospital Association (KHA) through EMSystems, a secure, online reporting system. One hundred and thirty-one (131) hospitals that have access to EMSystems are included in this surveillance program. KDHE has partnered with KHA to collect aggregate information on patients hospitalized for pneumonia or influenza.

The maps and graphs on pages 10-13 show the rate of hospital admissions for pneumonia or influenza reported by region and by hospital by week ending date. Each rate was calculated by dividing the number of patients admitted to the hospital with pneumonia or influenza by bed days. The denominator bed days was calculated by multiplying the number of staffed beds by seven.

## **Hospital Situational Awareness (EMSystems)**

As part of a U.S. Department of Health and Human Services assessment project, hospitals throughout Kansas submit information to the Kansas Hospital Association (KHA) through EMSystems, a secure, online reporting system. Every Wednesday, 134 hospitals in Kansas provide information that describe the current situation of the hospital at the time of the report. The data represent a “snapshot” in time and do not take into account changes observed over a span of time.

The maps presented in this report on pages 14-16 are the responses to the following question: “Is the facility seeing an increasing demand for patient care services, such as scheduling, triage, assessment, treatment, admissions, transfer, and discharge?”. Percentages were calculated by dividing the number of hospitals that responded “Yes” by the total number of hospitals that reported information and multiplying by 100.

## **Mortality Due to Pneumonia or Influenza**

The Office of Vital Statistics within the Bureau of Public Health Informatics at KDHE receives and preserves vital records for events (births, deaths, marriages, and divorces) which occur in Kansas. The mortality data on page 17 reflects the number and percentage of persons whose primary or underlying cause of death was attributed to pneumonia and / or influenza.

## **Self-Reported Influenza-like Illness**

The Behavioral Risk Factor Surveillance System (BRFSS), which is coordinated and partially funded by the Centers for Disease Control and Prevention, is the largest continuously conducted telephone survey

## Technical Notes (continued)

### **Self-Reported Influenza-like Illness (continued)**

in the world. It is conducted in every state, the District of Columbia, and several United States territories. The first BRFSS survey in Kansas was conducted as a point-in-time survey in 1990, and Kansas has conducted the BRFSS survey annually since 1992.

Beginning in September 2009, the BRFSS questionnaire was revised to include questions to assess influenza-like illness among adult respondents and other members of the household. The graphs on pages 18 and 19 provide the percent of adults, children, and households reporting ILI.

### **School Absenteeism Surveillance**

Data are collected by local health departments (LHDs) during each school week. LHDs report the number of schools with 10% or greater absenteeism and the total number of schools that submit data each week. LHDs submit data to KDHE by noon on Tuesday of the following week.

LHDs report county data in three categories: elementary school (i.e. K-5), middle school (i.e., 6-8), and high school (i.e., 9-12). The designated school category is based upon the majority of grades within the school; for instance, a school consisting of grade levels K-6 would be classified as an elementary school.

Percentages of school absenteeism by county shown on pages 20-26 may be unstable and changes over time should be interpreted with caution. "No report" classification indicates the LHD failed to report any data to KDHE. "No data" classification indicates that either the school(s) did not report any data to the LHD or there are no schools in the county for the specific school category.

### **Laboratory Testing at Kansas Department of Health and Environmental Laboratories (KHEL)**

The information on pages 27 and 28 represents data reported to KDHE for the week ending the previous Saturday. Prior to September 1, 2009 persons with symptoms consistent with ILI were tested at KHEL. Beginning September 1, specimens were only tested if the person was hospitalized, had died and the cause of death was suspected to be influenza, or if the person was seen at an ILINet Clinic Site.

### **Descriptive Epidemiology for Laboratory-Confirmed H1N1 Cases at KHEL**

The information on pages 29 and 30 represents data reported to KDHE for the week ending the previous Saturday. Only cases that were laboratory confirmed at KHEL are included.

# Data Quality Indicators

## **Percentage of Sites Represented in the Current Week's Data for the Following Sections:**

Outpatient Influenza-like Illness Surveillance — 71% (52 of 73 ILINet sites)

Hospital Admissions for Pneumonia or Influenza Surveillance (EMSystems) - 68% (90 of 132 hospitals)

Hospital Situational Awareness (EMSystems) - 69% (92 of 134 hospitals)

School Absenteeism Surveillance— 84% (88 of 105 Local Health Departments)

## Appendix - Number and County Location of ILINet Clinic Sites

Allen	1
Barton	2
Brown	1
Butler	1
Cherokee	1
Cheyenne	1
Clark	1
Cloud	1
Cowley	1
Crawford	1
Dickinson	3
Douglas	2
Ellis	2
Finney	1
Ford	1
Franklin	1
Geary	2
Grant	2
Greenwood	1
Harvey	1
Jefferson	1
Johnson	5
Kiowa	1
Labette	1
Leavenworth	1
Linn	1
Lyon	2
McPherson	1
Meade	1
Miami	1
Montgomery	2
Neosho	1
Pottawatomie	1
Pratt	1
Reno	2
Riley	3
Saline	2
Sedgwick	6
Seward	2
Shawnee	3
Sherman	1
Wichita	1
Wyandotte	6

## Appendix - List of Hospitals Included in Hospital Surveillance Section for Current Report

ALLEN COUNTY HOSPITAL IOLA  
ASHLAND HEALTH CENTER  
ATCHISON HOSPITAL  
BOB WILSON MEM GRANT CO HOSP ULYSSES  
CENTRAL KANSAS MEDICAL CTR GREAT BEND  
CLARA BARTON HOSPITAL HOISINGTON  
CLOUD COUNTY HEALTH CENTER CONCORDIA  
COFFEY COUNTY HOSPITAL BURLINGTON  
COFFEYVILLE REGIONAL MEDICAL CENTER  
COMMUNITY MEMORIAL HC MARYSVILLE  
CUSHING MEMORIAL HOSPITAL  
DECATUR COUNTY HOSPITAL OBERLIN  
ELLINWOOD DISTRICT HOSPITAL  
ELLSWORTH COUNTY MEDICAL CENTER  
GALICIA HEART HOSPITAL  
GEARY COMMUNITY HOSPITAL JUNCTION CITY  
GIRARD MEDICAL CENTER  
GOODLAND REGIONAL MEDICAL CENTER  
GOVE COUNTY MEDICAL CENTER QUINTER  
GRAHAM COUNTY HOSPITAL HILL CITY  
GREELEY COUNTY HEALTH SERVICES TRIBUNE  
GREENWOOD COUNTY HOSPITAL EUREKA  
GRISSELL MEM. HOSP. DIST. NO. 1 RANSOM  
HARPER COUNTY HOSP DIST NO 6 ANTHONY  
HERINGTON MUNICIPAL HOSPITAL  
HIAWATHA COMMUNITY HOSPITAL  
HILLSBORO COMMUNITY HOSPITAL  
HODGEMAN CO HEALTH CENTER JETMORE  
HOLTON COMMUNITY HOSPITAL  
JEFFERSON CO. MEM. HOSPITAL WINCHESTER  
JEWELL COUNTY HOSPITAL MANKATO  
KEARNY COUNTY HOSPITAL LAKIN  
KIOWA COUNTY MEM. HOSPITAL GREENSBURG  
KIOWA DISTRICT HOSPITAL KIOWA  
LABETTE HEALTH PARSONS  
LANE COUNTY HOSPITAL DIGHTON  
LAWRENCE MEMORIAL HOSPITAL  
LOGAN COUNTY HOSPITAL OAKLEY  
MEDICINE LODGE MEMORIAL HOSPITAL  
MEMORIAL HOSPITAL ABILENE  
MEMORIAL HOSPITAL MCPHERSON  
MERCY HOSPITAL INDEPENDENCE  
MERCY HOSPITAL MOUNDRIDGE  
MINNEOLA DISTRICT HOSPITAL  
MITCHELL COUNTY HOSPITAL BELOIT

MORTON COUNTY HEALTH SYSTEM ELKART  
MT. CARMEL REG MEDICAL CTR PITTSBURG  
NEMAHA VALLEY COMM. HOSPITAL SENECA  
NEOSHO MEMORIAL RMC CHANUTE  
NESS COUNTY HOSPITAL DIST. NO. 2  
NEWTON MEDICAL CENTER  
NINNESCAH VALLEY HEALTH SYS. KINGMAN  
OLATHE MEDICAL CENTER  
OSWEGO COMMUNITY HOSPITAL  
OTTAWA COUNTY HEALTH CENTER MINNEAPOLIS  
OVERLAND PARK REGIONAL MEDICAL CTR  
PHILLIPS COUNTY HOSPITAL PHILLIPSBURG  
PRATT REGIONAL MEDICAL CENTER  
PROMISE REGIONAL MEDICAL CENTER HUTCHINS  
RANSOM MEMORIAL HOSPITAL OTTAWA  
REPUBLIC COUNTY HOSPITAL BELLEVILLE  
ROOKS COUNTY HEALTH CENTER PLAINVILLE  
RUSH COUNTY MEMORIAL HOSPITAL LACROSSE  
SABETHA COMMUNITY HOSPITAL  
SAINT JOHN HOSPITAL  
SAINT LUKE'S SOUTH HOSPITAL  
SALINA REGIONAL HEALTH CENTER  
SATANTA DISTRICT HOSPITAL AND LTCU  
SCOTT COUNTY HOSPITAL  
SEDAN CITY HOSPITAL  
SHAWNEE MISSION MEDICAL CENTER  
SHERIDAN COUNTY HEALTH COMPLEX HOXIE  
SMITH COUNTY MEMORIAL HOSPITAL  
SOUTH CENTRAL KANSAS RMC ARKANSAS CITY  
SOUTHWEST MEDICAL CENTER LIBERAL  
ST. FRANCIS HEALTH CENTER TOPEKA  
STAFFORD DISTRICT HOSPITAL  
STANTON HEALTH CARE FACILITY JOHNSON  
STEVENS COUNTY HOSPITAL HUGOTON  
STORMONT VAIL HEALTHCARE TOPEKA  
SUMNER COUNTY DIST. NO. 1 CALDWELL  
TREGO CO. LEMKE MEM. HOSPITAL WAKEENEY  
UNIVERSITY OF KANSAS HOSPITAL  
VIA CHRISTI REGIONAL MED CTR WICHITA  
WAMEGO CITY HOSPITAL  
WASHINGTON COUNTY HOSPITAL  
WESLEY MEDICAL CENTER WICHITA  
WESTERN PLAINS MED. COMPLEX DODGE CITY  
WICHITA COUNTY HEALTH CENTER LEOTI  
WILLIAM NEWTON HOSPITAL WINFIELD